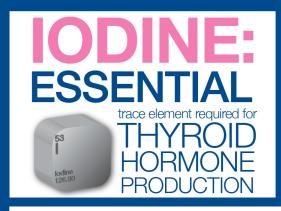
The importance of iodine growth, development and IQ







lodine deficiency

is the leading preventable cause of mental impaired function in the world.

World Health Organisation²

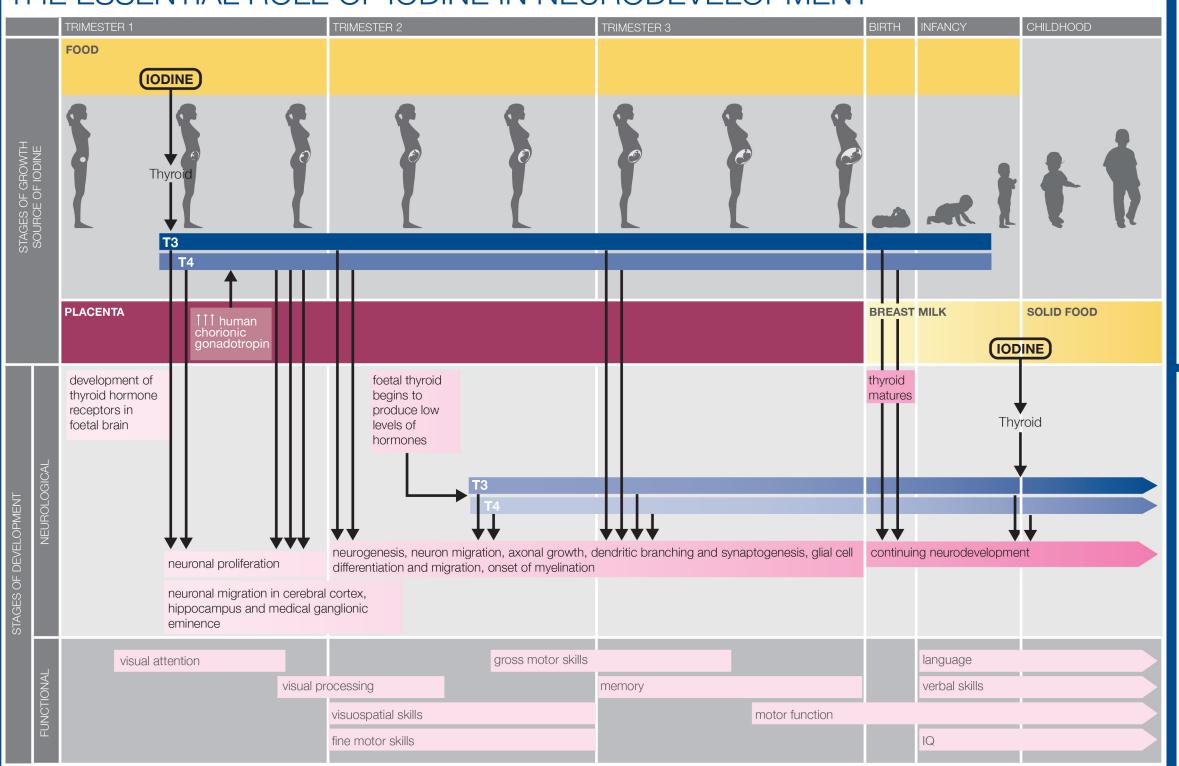


ALL WOMEN who are pregnant, breastfeeding or considering pregnancy

should take an iodine supplement⁴



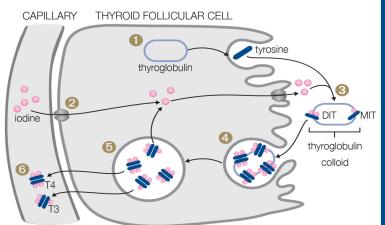
THE ESSENTIAL ROLE OF IODINE IN NEURODEVELOPMENT7,8



IODINE RECOMMENDATIONS5

Infants 0-6 months 7-12 months	Al (mcg/day) 90 110	RDI (mcg/day) N/A	UL mcg/day) Not possible to establish; source of intake should be milk, formula and food only.
Children & adolescents 1-3 years 4-8 years 9-13 years 14-18 years	EAR (mcg/day) 65 65 75 95	90 90 120 150	200 300 600 900
Adults >19 years	100	150	1100
Pregnancy 14-18 years 19-50 years	160 160	220 220	900
Lactation 14-18 years 19-50 years	190 190	270 270	900 1100
Al: adequate intake (used when recommended dietary intake cannot be determined);			

THYROID HORMONE PRODUCTION9



- 1 Thyroglobulin synthesised and released into follicle lumen.
- 2 lodine is trapped (active transport).
- 3 lodine attaches to tyrosine in colloid, forming monoiodotyrosine (MIT) and diiodotyrosine (DIT)
- 4 DIT and MIT link to form T3 and T4. Thyroglobulin colloid is endocytosed and combined with a lysosome
- 5 Deiodination. Lysosomal enzymes cleave T3 and T4 from thyroglobulin.
- 6 Free T3 and T4 enter the bloodstream.